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an origin of replication to direct replication of the vector in yeast.

22. The vector according to claim 21, further comprising: a selectable marker.

23. The vector according to claim 22, wherein the selectable marker is selected from the group consisting of URA3, LEU2, TRP1, HIS3, ARG4, and an antibiotic resistance gene.

24. The vector according to claim 21, further comprising: an origin of replication to direct replication of the vector in a bacterial cell.

25. The vector according to claim 24, wherein the origin of replication is selected from the group consisting of ColE1, Ori, and oriT.

26. The vector according to claim 21, wherein the protein or polypeptide is preceded by a signal peptide.

27. The vector according to claim 21, wherein the polynucleotide which encodes a protein or polypeptide is spliced in frame with a transcriptional enhancer element.

28. A method of producing a protein or polypeptide having phytase activity comprising:

providing an isolated appA polynucleotide, which encodes a protein or polypeptide with phytase activity; expressing said polynucleotide in a yeast host cell under conditions effective to produce the protein or polypeptide having phytase activity; and

isolating the expressed protein or polypeptide.

29. The method according to claim 28, wherein the yeast host cell is selected from the group consisting of *Saccharomyces* species, *Pichia* species, *Kluyveromyces* species, *Hansenula* species, *Candida* species, *Torulaspora* species, and *Schizosaccharomyces* species.

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30. The method according to claim 29, wherein the yeast host cell is *Pichia*.

31. The method according to claim 28, wherein the protein or polypeptide, preceded by a signal peptide, is secreted by the cell into a growth medium or is not secreted.

32. The method according to claim 31, wherein the protein or polypeptide is secreted by the yeast host cell into the growth medium and has a concentration greater than 300 units per milliliter of the growth medium.

33. The method according to claim 28, wherein the appA polynucleotide is spliced in frame with a transcriptional enhancer element.

34. The method according to claim 28, wherein the appA polynucleotide is carried on a vector for stable transformation.

35. The method according to claim 28, wherein the appA polynucleotide is carried on an artificial chromosome.

36. The method according to claim 28, wherein the appA polynucleotide is integrated into a chromosome of the yeast host cell.

37. The method according to claim 1, wherein the heterologous polynucleotide is an isolated phyA polynucleotide.

38. The yeast strain according to claim 12, wherein the heterologous polynucleotide is an isolated phyA polynucleotide.

39. The vector according to claim 21, wherein the polynucleotide is an isolated appA polynucleotide.

40. The vector according to claim 21, wherein the polynucleotide is an isolated phyA polynucleotide.

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